



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
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www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

Tremco Inc.
3735 Green Road
Beachwood, OH 44122

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Tremco Built-Up-Roof Systems over Steel Decks

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This renews and revises NOA# 11-1222.08 and consists of pages 1 through 20.
The submitted documentation was reviewed by Alex Tigera.



NOA No.: 13-0109.03
Expiration Date: 03/28/17
Approval Date: 05/30/13
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ROOFING SYSTEM APPROVAL

<u>Category:</u>	Roofing
<u>Sub-Category:</u>	BUR
<u>Deck Type:</u>	Steel
<u>Material:</u>	Fiberglass
<u>Maximum Design Pressure</u>	-107.5 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
BURMastic® Adhesive	5 or 55 gallon	Proprietary	Cold applied ply sheet and surfacing adhesive.
BURMastic® Adhesive SF	5 or 55 gallon	Proprietary	Cold applied ply sheet and surfacing adhesive.
BURMastic® Composite Ply	36" x 66.6'	ASTM D 4601 Type II	Type II asphalt impregnated glass felt for use in conventional and modified bitumen built-up roofing.
BURMastic® FR		Proprietary	Cold applied, fire rated flood coat.
BURMastic® Glass Ply	36" x 72'	ASTM D 4601 Type II	Asphalt impregnated polyester/fiberglass/polyester composite for use in conventional and modified bitumen built-up roofing.
BURMastic® Glass Ply 28#	36" x 108'	ASTM D 4601 Type II	Asphalt coated, fiberglass reinforced base/ply sheet.
One Coat Aluminum	5 gallon	ASTM D 2824	Fiber Aluminum pigmented roof coating.
Double-Duty Aluminum™	5 gallon	ASTM D 2824	Aluminum pigmented roof coating.
ICE Coating	5 and 55 gallons	Proprietary	High solids, water-based, elastomeric coating.
Tremlastic SP	5 or 55gallon	Proprietary	Non-fibered, polymer modified asphalt emulsion.
Fas-n-Free® Adhesive		Proprietary	One part, solvent free adhesive used for adhering Approved insulations to Approved substrates.
Tremco Low Rise Foam Insulation Adhesive		Proprietary	One part, solvent free adhesive used for adhering Approved insulations to Approved substrates.
Tremco Low Rise Foam Insulation Adhesive BG		Proprietary	One part, solvent free adhesive used for adhering Approved insulations to Approved substrates.
Tremco Low Rise Foam Insulation Adhesive Green		Proprietary	One part, solvent free adhesive used for adhering Approved insulations to Approved substrates.



Poly-THERM® Roofing Ply	10 squares per roll 39¾" wide	Proprietary	Continuous filament, spun bonded polyester ply sheet for use in conventional and modified bitumen built-up roof systems.
POWERply Modified Hot Melt Adhesive	60 lb. Keg	Proprietary	Polymer modified hot melt adhesive systems.
Premium III™	100 lb.	ASTM D 312	Type III asphalt for use in built-up roofing systems.
Premium IV™	100 lb.	ASTM D 312	Type IV asphalt for use in built-up roofing systems
THERMastic® Adhesive	60 lb.	Proprietary	All purpose roof cement.
THERMglass® IV	3' x 180'	ASTM D 2178 Type IV	Type IV asphalt impregnated glass felt for use in conventional and modified bitumen built-up roof systems.
POWERply IV	3' x 180'	ASTM D 2178 Type IV	Type IV asphalt impregnated glass felt for use in conventional and modified bitumen built-up roof systems.
THERMglass® VI	3' x 180'	ASTM D 2178 Type VI	Type VI asphalt impregnated glass felt for use in conventional and modified bitumen built-up roof systems.
THERMglass® VI	3' x 180'	ASTM D 2178 Type VI	Type VI asphalt impregnated glass felt for use in conventional and modified bitumen built-up roof systems.
POWERply VI	3' x 180'	ASTM D 2178 Type VI	Type VI asphalt impregnated glass felt for use in conventional and modified bitumen built-up roof systems.
TREMprime™ Q.D.	1, 5 or 55 gallon	ASTM D 41	Asphalt based roofing primer.
Tremprime® WB	5 gallon	Proprietary	Water based roofing primer.
Rock-It Adhesive	5 or 50 gallon containers	Proprietary	A white, highly reflective, low volatile surfacing adhesive
Rock-It WB Adhesive	5 or 50 gallon containers	Proprietary	A water based, white, highly reflective, low volatile surfacing adhesive
BURmastic Modified Composite Ply	3' X 72' rolls	ASTM D 4601-98 Type II	A polyester/glass/polyester trilaminate reinforcement coated with waterproofing asphalt modified with SBS rubber
BURmastic Composite Ply Premium	3' X 72' rolls	ASTM D 4601-98 Type II	A polyester/glass/polyester trilaminate reinforcement coated with waterproofing asphalt.
BURmastic Modified Premium Composite Ply	3' X 72' rolls	ASTM D 4601-98 Type II	A polyester/glass/polyester trilaminate reinforcement coated with waterproofing asphalt modified with SBS rubber



BURmastic Supreme Composite Ply	3' X 72' rolls	ASTM D 4601-98 Type II	A polyester/glass/polyester trilaminate reinforcement coated with waterproofing asphalt.
BURmastic Modified Supreme Composite Ply	3' X 72' rolls	ASTM D 4601-98 Type II	A polyester/glass/polyester trilaminate reinforcement coated with waterproofing asphalt with SBS rubber
POWERply HT Base	3' X 72' rolls		A smooth surfaced, modified bitumen base ply sheet constructed with a non woven fiberglass mat/fiberglass scrim/polyester mat trilaminate reinforcement coated with an asphalt modified with an SBS elastomer.
POWERply HE Base	39 3/8" x 51'5" rolls	ASTM D 6164 Type 1 Grade S	A smooth surfaced, high elongation modified bitumen base sheet constructed with selected bitumens, modified with compatible SBS elastomers and reinforced with a non woven polyester mat.
POWERply Heavy Duty Base	3' X 36'		A smooth surfaced high strength modified bitumen base ply sheet constructed with a non woven fiberglass mat/fiberglass scrim bilaminate reinforcement coated with a an asphalt modified with an SBS elastomer.



APPROVED INSULATIONS:**TABLE 2**

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
ENRGY 3, ENRGY 3 Plus	Polyisocyanurate foam insulation	Johns Manville
ACFoam II	Polyisocyanurate foam insulation	Atlas Roofing Corporation
ISO 95+ GL	Polyisocyanurate foam insulation	Firestone Building Products
Multi-Max-3	Polyisocyanurate foam insulation	Rmax Operating, LLC
Perlite	Perlite insulation	Generic
High Density Wood Fiberboard	Wood fiberboard insulation	Generic
Tremco Densdeck	Silicon coated gypsum	Tremco Inc.
Tremco Trisotech G	Polyisocyanurate foam insulation	Tremco Inc.

APPROVED FASTENERS:**TABLE 3**

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
1.	Dekfast Fasteners #12,	Insulation fastener for wood, steel and concrete decks		SFS Intec, Inc.
2.	Dekfast Fasteners #14	Insulation fastener for wood, steel and concrete decks		SFS Intec, Inc.
3.	Dekfast Fasteners #15 HS	Insulation fastener for wood, steel and concrete decks		SFS Intec, Inc.
4.	Dekfast Hex Plate	Galvalume hex stress plate.	2 7/8" x 3 1/4"	SFS Intec, Inc.
5.	Dekfast DekFlat Round Plastic Lock Plate	Polypropylene locking plate.	3" x 3 1/4"	SFS Intec, Inc.
6.	#12 Roofgrip Fasteners	Insulation fastener for wood and steel.		OMG, Inc.
7.	Accutrac Hextra	Pre-assembled Insulation fastener and plate		OMG, Inc.
8.	Metal Plate	Galvalume stress plate.	3" round 3" square	OMG, Inc.
9.	OMG Standard (#12)	Insulation fastener		OMG, Inc.
10.	OMG Heavy Duty (#14)	Insulation fastener		OMG, Inc.
11.	ASAP RoofGrip Pre- Assembled System	Pre-assembled Insulation fastener and plate		OMG, Inc.
12.	OMG Plastic Plate	Polypropylene plastic plate	3.25" round	OMG, Inc.



APPROVED FASTENERS:**TABLE 3**

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
13.	Polymer Gyptec Insulation Plate	3.5" round galvalume AZ55 steel plate	3.5" round	OMG, Inc.
14.	OMG 3" Galvalume Steel Plate	3" round galvalume steel plate	3" round	OMG, Inc.
15.	Tru-Fast DP (#12) fasteners	Insulation fastener for steel and wood decks		The Tru-Fast Corp.
16.	Tru- HD (#14) fasteners	Insulation fastener for steel and wood decks		The Tru-Fast Corp.
17.	Tru-Fast EHD (#15) fasteners	Insulation fastener for steel and wood decks		The Tru-Fast Corp.
18.	Tru-Fast Metal Insulation Plates	3" round galvalume AZ55 steel plate	3" round	The Tru-Fast Corp.
19.	Tru-Fast Plastic Insulation Plates	Polyethylene plastic plate	3" round	The Tru-Fast Corp.
20.	Tremco #14	Insulation fastener		Tremco, Inc.
21.	Tremco Metal Plates	3" round galvalume AZ50 steel plate	3" round	Tremco, Inc.



EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Description</u>	<u>Date</u>
Applied Research Laboratories Factory Mutual Research Corporation	27076	physical properties	
	J.I. #2Y5A2.AM	FM 4470	11/16/94
	J.I. #2Y9A5.AM	FM 4470	11/13/95
	J.I. #0Z8A3.AM	FM 4470	06/13/95
	J.I. #2D1A8.AM	FM 4470	07/27/00
	J.I. #0D0A9.AM	FM 4470	08/01/00
	3003102	FM 4470	10/04/99
	3010780	FM 4470	04/18/02
	3015502	FM 4470	12/30/04
	3021358	FM 4470	11/19/08
	3043423	FM 4470	12/14/11
	3045534	FM 4470	04/04/12
	3047916	FM 4470	12/13/12
	3045650	FM 4470	09/27/12
	3024975	FM 4470	11/21/06
PRI Asphalt Technologies, Inc.	TRE-15-02-01	Physical Properties	05/25/99
Underwriters Laboratories, Inc.	R4170	UL790	01/01/95
IRT of S. Florida	00012	TAS 114	08/03/00
PRI Construction Materials Technologies	TRE-056-02-01	ASTM D 4601	07/25/12
	TRE-057-02-01	ASTM D 4601	07/25/12
	TRE-058-02-01	ASTM D 4601	07/25/12
	TRE-060-02-01	ASTM D 5726	07/25/12
	TRE-061-02-01	ASTM D 6163	10/01/12
	TRE-062-02-01	ASTM D 6164	10/04/12
	TRE-068-02-01	ASTM D 3019	12/05/12
	TRE-069-02-01	ASTM D 3019	12/05/12
	TRE-070-02-01	ASTM D 4479	12/05/12
	TRE-071-02-01	ASTM D 3019	12/05/12
	TRE-072-02-01	ASTM D 5100	12/05/12
	TRE-073-02-01	ASTM D 312	12/05/12
	TRE-074-02-01	ASTM D 312	12/05/12
	TRE-075-02-01	ASTM 6152	12/04/12
	TRE-076-02-01	ASTM D 6152	12/05/12
	TRE-077-02-01	ASTM D 1227	12/05/12
	TRE-078-02-01	ASTM D 1227	12/05/12
	TRE-079-02-01	ASTM D 41	12/05/12
	TRE-080-02-01	ASTM D 6083	12/05/12
	TRE-081-02-01	ASTM D 2824	12/05/12
	TRE-082-02-01	ASTM D 4586	12/05/12
	TRE-083-02-01	ASTM D 2824	12/05/12
	TRE-106-02-01	ASTM D 2178	12/19/12
	TRE-107-02-01	ASTM D 2178	12/19/12



APPROVED ASSEMBLIES:

Membrane Type:	BUR
Deck Type 2I:	Steel, Insulated
Deck Description:	18-22 ga. steel
System Type B(1):	Base layer of insulation mechanically fastened, optional top layer adhered with approved asphalt or adhesive.

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Trisotech G, AC Foam II Minimum 1.3" thick	1, 2, 3, 6, 9, 10	1:2 ft ²
ENRGY-3 Minimum 1.4" thick	1, 2, 3, 6, 7, 9, 10, 15, 16, 17	1:3 ft ²
ENRGY-3 Plus Minimum 1.5" thick	1, 2, 3, 6, 7, 9, 10, 15, 16, 17	1:3 ft ²
Iso 95 + GL Minimum 1.4" thick	1, 2, 3, 6, 7, 9, 10, 15, 16, 17	1:4 ft ²
Miami Dade Approved Perlite Minimum ¾" thick	1, 2, 3, 9, 10	1:2 ft ²
Miami Dade Approved High Density Wood Fiber Minimum ½" thick	1, 2, 3, 6, 7, 15, 16, 17	1:4 ft ²

Note: Base layer shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Any of the insulations listed for Base Layer above.	N/A	N/A

Note: Apply optional top layer of insulation in a full mopping of approved hot asphalt applied within the EVT range and at a rate of 20-40 lbs/100 ft² or in Fas-n-Free Insulation Adhesive applied in ribbons at a coverage rate of 1.5 gallons per square or in one of the following: Tremco Low Rise Foam Insulation Adhesive, Tremco Low Rise Foam Insulation Adhesive BG, Tremco Low Rise Foam Insulation Adhesive Green applied in ¾" wide ribbons spaced 12" o.c.. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side face down.



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Base Sheet: (Optional) One ply BURmastic Composite Ply, BURmastic Modified Composite Ply, BURmastic Composite Ply Premium, BURmastic Modified Premium Composite Ply, BURmastic Supreme Composite Ply, BURmastic Modified Supreme Composite Ply, POWERply Heavy Duty Base, POWERply HE Base, POWERply HT Base, BURmastic Glass Ply, or BURmastic Glass Ply-28lb or approved ASTM D 4601 fiberglass base sheet adhered to substrate with THERMastic Adhesive, POWERply Modified Hot Melt, Premium III, Premium IV, or type III asphalt.

Ply Sheet: Three or more plies of THERMglass IV, POWERply IV, THERMglass VI, POWERply VI or PolyTHERM ply sheet or approved ASTM D 2178 Type IV or Type VI ply sheet adhered to substrate with THERMastic Adhesive, POWERply Modified Hot Melt, Premium III, Premium IV or Type III asphalt at a rate of 30 to 35 lb/sq..

Surfacing: Install one of the following:

1. Two part surfacing consisting of 4-5 gal./sq. of Tremlastic SP surfaced with Double Duty Aluminum coating at $\frac{3}{4}$ gal./sq or ICE Coating applied in a single coat at a maximum coverage rate of 4 gals / SQ or One Coat Aluminum applied in one coat at a maximum coverage rate of 2.5- 3 gals/ SQ.
2. Flood coat of THERMastic Adhesive and gravel at application rates of 3.5 gal./sq. and 400 lbs./sq., respectively.
3. Flood coat of BURmastic Adhesive with applications rates of 4-5 gal./sq. or Premium III, Premium IV or Type III asphalt at 30 to 35 lb/sq and gravel at 400 lbs/sq., respectively.
4. Min. 200 lbs white marble applied in Rock-it or Rock-it WB adhesive at 5 gal. / SQ.
5. Prime surface with TremPrime WB at a rate of 200-400 sqs per gallon. Apply ICE coating in two coats at a maximum coverage of 2 gals / SQ or a single coat at a maximum coverage rate of 4 gals / SQ.
6. Apply One Coat Aluminum to surface with a minimum coverage rate of 2.5-3 gals/SQ.

Maximum Design

Pressure: -45 psf; (See General Limitation #9)



Membrane Type: BUR
Deck Type 2I: Steel, Insulated
Deck Description: 18-22 ga. steel
System Type B(2): Base layer of insulation mechanically fastened, optional top layer adhered with approved asphalt or adhesive.

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Trisotech G, AC Foam II Minimum 1.3" thick	1, 2, 3, 6, 9, 10	1:4 ft²
ENRGY-3 Minimum 1.4" thick	1, 2, 3, 6, 7, 9, 10, 15, 16, 17	1:3 ft²
ENRGY-3 Plus Minimum 1.5" thick	1, 2, 3, 6, 7, 9, 10, 15, 16, 17	1:3 ft²
Iso 95 + GL Minimum 1.4" thick	1, 2, 3, 6, 7, 15, 16, 17	1:4 ft²
Miami Dade Approved Perlite Minimum ¾" thick	1, 2, 3, 9, 10	1:2 ft²
Miami Dade Approved High Density Wood Fiber Minimum ½" thick	1, 2, 3, 6, 9, 10, 15, 16, 17	1:4 ft²

Note: Base layer shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Any of the insulations listed for Base Layer above.	N/A	N/A

Note: Apply optional top layer of insulation in a full mopping of approved hot asphalt applied within the EVT range and at a rate of 20-40 lbs/100 ft² or in Fas-n-Free Insulation Adhesive applied in ribbons at a coverage rate of 1.5 gallons per square or in one of the following: Tremco Low Rise Foam Insulation Adhesive, Tremco Low Rise Foam Insulation Adhesive BG, Tremco Low Rise Foam Insulation Adhesive Green applied in ¾" wide ribbons spaced 12" o.c. . Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side face down.



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Base Sheet: (Optional) BURmastic Composite Ply, BURmastic Modified Composite Ply, BURmastic Composite Ply Premium, BURmastic Modified Premium Composite Ply, BURmastic Supreme Composite Ply, BURmastic Modified Supreme Composite Ply, POWERply Heavy Duty Base, POWERply HE Base, POWERply HT Base, BURmastic Glass Ply, or BURmastic Glass Ply-28lb or Approved ASTM D 4601 fiberglass base sheet adhered to the substrate with BURmastic Adhesive or BURmastic Adhesive SF at 2.5-3 gal./sq.

Ply Sheet: Two or more plies of BURmastic Composite Ply, BURmastic Modified Composite Ply, BURmastic Composite Ply Premium, BURmastic Modified Premium Composite Ply, BURmastic Supreme Composite Ply, BURmastic Modified Supreme Composite Ply, POWERply Heavy Duty Base, POWERply HE Base, POWERply HT Base, BURmastic Glass Ply, or BURmastic Glass Ply-28lb or approved ASTM D 4601 fiberglass base/ply sheet adhered in BURmastic Adhesive or BURmastic Adhesive SF at a rate of 2.5-3 gal./sq.

Surfacing: Install one of the following:

1. Two part surfacing consisting of 4-5 gal./sq. of Tremlastic SP surfaced with Double Duty Aluminum coating at $\frac{3}{4}$ gal./sq or ICE Coating applied in a single coat at a maximum coverage rate of 4 gals / SQ or One Coat Aluminum applied in one coat at a maximum coverage rate of 2.5- 3 gals/ SQ.
2. Flood coat of THERMastic Adhesive and gravel at application rates of 3.5 gal./sq. and 400 lbs./sq., respectively.
3. Flood coat of BURmastic Adhesive with applications rates of 4-5 gal./sq. or Premium III, Premium IV or Type III asphalt at 30 to 35 lb/sq and gravel at 400 lbs/sq., respectively.
4. Min. 200 lbs white marble applied in Rock-it or Rock-it WB adhesive at 5 gal. / SQ.
5. Prime surface with TremPrime WB at a rate of 200-400 sqs per gallon. Apply ICE coating in two coats at a maximum coverage of 2 gals / SQ or a single coat at a maximum coverage rate of 4 gals / SQ.
6. Apply One Coat Aluminum to surface with a minimum coverage rate of 2.5-3 gals/SQ.

Maximum Design

Pressure: -45 psf; (See General Limitation #9)



Membrane Type: BUR
Deck Type 2I: Steel, Insulated
Deck Description: 18-22 ga. steel
System Type B(3): Base layer of insulation mechanically fastened, top layer adhered with approved asphalt or adhesive.

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Any approved polyisocyanurate Minimum 2" thick	20	1:2 ft ²

Note: Base layer shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Miami Dade Approved High Density Wood Fiber Minimum ½" thick	N/A	N/A

Note: Apply top layer of insulation in a full mopping of approved hot asphalt applied within the EVT range and at a rate of 20-40 lbs/100 ft² or in Fas-n-Free Insulation Adhesive applied in ½" to ¾" wide ribbons at a coverage rate of 1.5 gal./sq. or in one of the following: Tremco Low Rise Foam Insulation Adhesive, Tremco Low Rise Foam Insulation Adhesive BG, Tremco Low Rise Foam Insulation Adhesive Green applied in ¾" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side face down.

Base Sheet: (Optional) One ply BURmastic Composite Ply, BURmastic Modified Composite Ply, BURmastic Composite Ply Premium, BURmastic Modified Premium Composite Ply, BURmastic Supreme Composite Ply, BURmastic Modified Supreme Composite Ply, POWERply Heavy Duty Base, POWERply HE Base, POWERply HT Base, BURmastic Glass Ply, or BURmastic Glass Ply-28lb adhered to substrate with THERMastic Adhesive, POWERply Modified Hot Melt, Premium III, Premium IV, or type III asphalt.

Ply Sheet: Three or more plies of THERMglass IV, POWERply IV, THERMglass VI, POWERply VI or PolyTHERM ply sheet adhered to substrate with THERMastic Adhesive, POWERply Modified Hot Melt, Premium III, Premium IV or Type III asphalt at a rate of 30 to 35 lb/sq.



Surfacing: Install one of the following:

1. Two part surfacing consisting of 4-5 gal./sq. of Tremlastic SP surfaced with Double Duty Aluminum coating at $\frac{3}{4}$ gal./sq. or ICE Coating applied in a single coat at a maximum coverage rate of 4 gals / SQ or One Coat Aluminum applied in one coat at a maximum coverage rate of 2.5- 3 gals/ SQ.
2. Flood coat of THERMastic Adhesive and gravel at application rates of 3.5 gal./sq. and 400 lbs./sq., respectively.
3. Flood coat of BURmastic Adhesive with applications rates of 4-5 gal./sq. or Premium III, Premium IV or Type III asphalt at 30 to 35 lb/sq and gravel at 400 lbs/sq., respectively.
4. Min. 200 lbs white marble applied in Rock-it or Rock-it WB adhesive at 5 gal. / SQ.
5. Prime surface with TremPrime WB at a rate of 200-400 sqs per gallon. Apply ICE coating in two coats at a maximum coverage of 2 gals / SQ or a single coat at a maximum coverage rate of 4 gals / SQ.
6. Apply One Coat Aluminum to surface with a minimum coverage rate of 2.5-3 gals/SQ.

Maximum Design

Pressure: -82.5 psf; (See General Limitation #7)



Membrane Type: BUR
Deck Type 2I: Steel, Insulated
Deck Description: 18-22 ga. steel
System Type B(4): Base layer of insulation mechanically fastened, top layer adhered with approved asphalt or adhesive.

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Any approved polyisocyanurate Minimum 2" thick	20	1:2 ft ²

Note: Base layer shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Miami Dade Approved High Density Wood Fiber Minimum ½" thick	N/A	N/A

Note: Apply top layer of insulation in a full mopping of approved hot asphalt applied within the EVT range and at a rate of 20-40 lbs/100 ft² or in Fas-n-Free Insulation Adhesive applied in ½" to ¾" wide ribbons at a coverage rate of 1.5 gal./sq. or in one of the following: Tremco Low Rise Foam Insulation Adhesive, Tremco Low Rise Foam Insulation Adhesive BG, Tremco Low Rise Foam Insulation Adhesive Green applied in ¾" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side face down.

Base Sheet: (Optional) BURmastic Composite Ply, BURmastic Modified Composite Ply, BURmastic Composite Ply Premium, BURmastic Modified Premium Composite Ply, BURmastic Supreme Composite Ply, BURmastic Modified Supreme Composite Ply, POWERply Heavy Duty Base, POWERply HE Base, POWERply HT Base, BURmastic Glass Ply, or BURmastic Glass Ply-28lb adhered to the substrate with BURmastic Adhesive or BURmastic Adhesive SF at 2.5-3 gal./sq.

Ply Sheet: Two or more plies of BURmastic Composite Ply, BURmastic Modified Composite Ply, BURmastic Composite Ply Premium, BURmastic Modified Premium Composite Ply, BURmastic Supreme Composite Ply, BURmastic Modified Supreme Composite Ply, POWERply HT Base, BURmastic Glass Ply, or BURmastic Glass Ply-28lb adhered in BURmastic Adhesive or BURmastic Adhesive SF at a rate of 2.5-3 gal./sq



Surfacing: Install one of the following:

1. Two part surfacing consisting of 4-5 gal./sq. of Tremlastic SP surfaced with one of the following:
 - a) Double Duty Aluminum coating at $\frac{3}{4}$ gal./sq.
 - b) 60 lbs. #11 3M roofing granule's in wet Tremlastic SP.
 - c) Crushed Stone, nominal $\frac{3}{64}$ "- $\frac{3}{8}$ " at 240lbs./sq. in wet Tremlastic SP.
 - d) ICE Coating applied in a single coat at a maximum coverage rate of 4 gals / SQ
 - e) One Coat Aluminum applied in one coat at a maximum coverage rate of 2.5- 3 gals/ SQ.
 - f)
2. Flood coat of BURmastic Adhesive and gravel at application rates of 5-6 $\frac{1}{5}$ gal./sq. and 400 lbs./sq., respectively
3. Min. 200 lbs white marble applied in Rock-it or Rock-it WB adhesive at 5 gal. / SQ.
4. Prime surface with TremPrime WB at a rate of 200-400 sqs per gallon. Apply ICE coating in two coats at a maximum coverage of 2 gals / SQ or a single coat at a maximum coverage rate of 4 gals / SQ.
5. Apply One Coat Aluminum to surface with a minimum coverage rate of 2.5-3 gals/SQ.

Maximum Design

Pressure: -82.5 psf; (See General Limitation #7)



Membrane Type: BUR
Deck Type 2I: Steel, Insulated
Deck Description: 18-22 ga. steel
System Type C(1): All layers of insulation simultaneously fastened.

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
AC-Foam II, Trisotech G, ENRGY-3, ENRGY-3 Plus Minimum 1.3" thick	N/A	N/A
Multi-Max-3 Minimum 1.4" thick	N/A	N/A
Miami Dade Approved High Density Wood Fiber Minimum ½" thick	N/A	N/A
Miami Dade Approved Perlite Minimum ¾" thick	N/A	N/A

Note: All layers shall be simultaneously attached; see top layer below for fasteners and density.

<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Trisotech G, ACFoam II Minimum 1.3" thick	1, 2, 3, 6, 9, 10	1:4 ft ²
ENRGY-3 Minimum 1.4" thick	1, 2, 3, 6, 7, 9, 10, 15, 16, 17	1:3 ft ²
ENRGY-3 Plus Minimum 1.5" thick	1, 2, 3, 6, 7, 9, 10, 15, 16, 17	1:3 ft ²
Iso 95 + GL Minimum 1.4" thick	1, 2, 3, 6, 7, 9, 10, 15, 16, 17	1:4 ft ²
Miami Dade Approved Perlite Minimum ¾" thick	1, 2, 3, 9, 10	1:2 ft ²
Miami Dade Approved High Density Wood Fiber Minimum ½" thick	1, 2, 3, 6, 7, 9, 10, 15, 16, 17	1:4 ft ²



Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: (Optional) One ply BURmastic Composite Ply, BURmastic Modified Composite Ply, BURmastic Composite Ply Premium, BURmastic Modified Premium Composite Ply, BURmastic Supreme Composite Ply, BURmastic Modified Supreme Composite Ply, POWERply Heavy Duty Base, POWERply HE Base, POWERply HT Base, BURmastic Glass Ply, or BURmastic Glass Ply-28lb or approved ASTM D 4601 fiberglass base sheet adhered to substrate with THERMastic Adhesive, POWERply Modified Hot Melt, BURmastic Adhesive, Premium III, Premium IV, or type III asphalt.

Ply Sheet: Three or more plies of THERMglass IV, POWERply IV, THERMglass VI, POWERply VI or PolyTHERM ply sheet or approved ASTM D 2178 Type IV or Type VI ply sheet adhered to substrate with THERMastic Adhesive, POWERply Modified Hot Melt, Premium III, Premium IV or Type III asphalt at a rate of 30 to 35 lb/sq.

Surfacing: Install one of the following:

1. Two part surfacing consisting of 4-5 gal./sq. of Tremlastic SP surfaced with Double Duty Aluminum coating at $\frac{3}{4}$ gal./sq. or ICE Coating applied in a single coat at a maximum coverage rate of 4 gals / SQ or One Coat Aluminum applied in one coat at a maximum coverage rate of 2.5- 3 gals/ SQ.
2. Flood coat of THERMastic Adhesive and gravel at application rates of 3.5 gal./sq. and 400 lbs./sq., respectively.
3. Flood coat of BURmastic Adhesive with applications rates of 4-5 gal./sq. or Premium III, Premium IV or Type III asphalt at 30 to 35 lb/sq and gravel at 400 lbs/sq., respectively.
4. Min. 200 lbs white marble applied in Rock-it or Rock-it WB adhesive at 5 gal. / SQ.
5. Prime surface with TremPrime WB at a rate of 200-400 sqs per gallon. Apply ICE coating in two coats at a maximum coverage of 2 gals / SQ or a single coat at a maximum coverage rate of 4 gals / SQ.
6. Apply One Coat Aluminum to surface with a minimum coverage rate of 2.5-3 gals/SQ.

Maximum Design

Pressure: -45 psf; (See General Limitation #9.)



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Membrane Type: BUR
Deck Type 2I: Steel, Insulated
Deck Description: 18-22 ga. steel
System Type C(2): All layers of insulation simultaneously fastened.

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
AC-Foam II, Trisotech G, ENRGY-3, ENRGY-3 Plus Minimum 1.3" thick	N/A	N/A
Multi-Max-3 Minimum 1.4" thick	N/A	N/A
Miami Dade Approved High Density Wood Fiber Minimum ½" thick	N/A	N/A
Miami Dade Approved Perlite Minimum ¾" thick	N/A	N/A

Note: All layers shall be simultaneously attached; see top layer below for fasteners and density.

<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Trisotech G, ACFoam II Minimum 1.3" thick	1, 2, 3, 6, 9, 10	1:4 ft ²
ENRGY-3 Minimum 1.4" thick	1, 2, 3, 6, 7, 9, 10, 15, 16, 17	1:3 ft ²
ENRGY-3 Plus Minimum 1.5" thick	1, 2, 3, 6, 7, 9, 10, 15, 16, 17	1:3 ft ²
Iso 95 + GL Minimum 1.4" thick	1, 2, 3, 6, 7, 9, 10, 15, 16, 17	1:4 ft ²
Miami Dade Approved Perlite Minimum ¾" thick	1, 2, 3, 9, 10	1:2 ft ²
Miami Dade Approved High Density Wood Fiber Minimum ½" thick	1, 2, 3, 6, 7, 9, 10, 15, 16, 17	1:4 ft ²



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Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: (Optional) BURmastic Composite Ply, BURmastic Modified Composite Ply, BURmastic Composite Ply Premium, BURmastic Modified Premium Composite Ply, BURmastic Supreme Composite Ply, BURmastic Modified Supreme Composite Ply, POWERply Heavy Duty Base, POWERply HE Base, POWERply HT Base, BURmastic Glass Ply, or BURmastic Glass Ply-28lb or Approved ASTM D 4601 fiberglass base sheet adhered to the substrate with BURmastic Adhesive or BURmastic Adhesive SF at 2.5-3 gal./sq.

Ply Sheet: Two or more plies of BURmastic Composite Ply, BURmastic Modified Composite Ply, BURmastic Composite Ply Premium, BURmastic Modified Premium Composite Ply, BURmastic Supreme Composite Ply, BURmastic Modified Supreme Composite Ply, POWERply HT Base, BURmastic Glass Ply, or BURmastic Glass Ply-28lb or approved ASTM D 4601 fiberglass base/ply sheet adhered in BURmastic Adhesive or BURmastic Adhesive SF at a rate of 2.5-3 gal./sq.

Surfacing: Install one of the following:

1. Two part surfacing consisting of 4-5 gal./sq. of Tremlastic SP surfaced with Double Duty Aluminum coating at $\frac{3}{4}$ gal./sq. or ICE Coating applied in a single coat at a maximum coverage rate of 4 gals / SQ or One Coat Aluminum applied in one coat at a maximum coverage rate of 2.5- 3 gals/ SQ.
2. Flood coat of THERMastic Adhesive and gravel at application rates of 3.5 gal./sq. and 400 lbs./sq., respectively.
3. Flood coat of BURmastic Adhesive with applications rates of 4-5 gal./sq. or Premium III, Premium IV or Type III asphalt at 30 to 35 lb/sq and gravel at 400 lbs/sq., respectively.
4. Min. 200 lbs white marble applied in Rock-it or Rock-it WB adhesive at 5 gal. / SQ.
5. Prime surface with TremPrime WB at a rate of 200-400 sqs per gallon. Apply ICE coating in two coats at a maximum coverage of 2 gals / SQ or a single coat at a maximum coverage rate of 4 gals / SQ.
6. Apply One Coat Aluminum to surface with a minimum coverage rate of 2.5-3 gals/SQ.

Maximum Design

Pressure: -45 psf; (See General Limitation #9.)



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STEEL DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117, calculations shall be signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant.
2. For steel deck application where specific deck construction is not referenced: The deck shall be a minimum 22 gage attached with 5/8" puddle welds with weld washers at every flute with maximum deck spans of 5 ft. o.c.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance, refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each sidelap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9N-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE



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